# §5414. Repealed. Pub. L. 106-34, §10, June 8, 1999, 113 Stat. 123

Section, Pub. L. 101–592, §15, Nov. 16, 1990, 104 Stat. 2952; Pub. L. 105–234, §1, Aug. 14, 1998, 112 Stat. 1536, related to applicability of this chapter.

### CHAPTER 81—HIGH-PERFORMANCE COMPUTING

Sec.

5501. Findings.5502. Purposes.5503. Definitions.

# SUBCHAPTER I—HIGH-PERFORMANCE COMPUTING RESEARCH AND DEVELOPMENT

5511. National High-Performance Computing Program.

5512. National Research and Education Network.

5513. Next Generation Internet.

#### SUBCHAPTER II—AGENCY ACTIVITIES

National Science Foundation activities.
 National Aeronautics and Space Administration activities.

5523. Department of Energy activities.5524. Department of Commerce activities.

5525. Environmental Protection Agency activities.

5526. Role of Department of Education.

5527. Miscellaneous provisions.

5528. Fostering United States competitiveness in high-performance computing and related activities.

## SUBCHAPTER III—DEPARTMENT OF ENERGY HIGH-END COMPUTING REVITALIZATION

5541. Definitions.

5542. Department of Energy high-end computing research and development program.

5543. Authorization of appropriations.

#### § 5501. Findings

The Congress finds the following:

- (1) Advances in computer science and technology are vital to the Nation's prosperity, national and economic security, industrial production, engineering, and scientific advancement.
- (2) The United States currently leads the world in the development and use of high-performance computing for national security, industrial productivity, science, and engineering, but that lead is being challenged by foreign competitors.
- (3) Further research and development, expanded educational programs, improved computer research networks, and more effective technology transfer from government to industry are necessary for the United States to reap fully the benefits of high-performance computing.
- (4) A high-capacity, flexible, high-speed national research and education computer network is needed to provide researchers and educators with access to computational and information resources, act as a test bed for further research and development for high-capacity and high-speed computer networks, and provide researchers the necessary vehicle for continued network technology improvement through research.
- (5) Several Federal agencies have ongoing high-performance computing programs, but improved long-term interagency coordination,

cooperation, and planning would enhance the effectiveness of these programs.

- (6) A 1991 report entitled "Grand Challenges: High-Performance Computing and Communications" by the Office of Science and Technology Policy, outlining a research and development strategy for high-performance computing, provides a framework for a multiagency high-performance computing program. Such a program would provide American researchers and educators with the computer and information resources they need, and demonstrate how advanced computers, high-capacity and high-speed networks, and electronic data bases can improve the national information infrastructure for use by all Americans.
- (7) Additional research must be undertaken to lay the foundation for the development of new applications that can result in economic growth, improved health care, and improved educational opportunities.
- (8) Research in new networking technologies holds the promise of easing the economic burdens of information access disproportionately borne by rural users of the Internet.
- (9) Information security is an important part of computing, information, and communications systems and applications, and research into security architectures is a critical aspect of computing, information, and communications research programs.

(Pub. L. 102–194, §2, Dec. 9, 1991, 105 Stat. 1594; Pub. L. 105–305, §2(b), Oct. 28, 1998, 112 Stat. 2919.)

#### AMENDMENTS

1998—Par. (4). Pub. L. 105–305, §2(b)(1), added par. (4) and struck out former par. (4) which read as follows: "A high-capacity and high-speed national research and education computer network would provide researchers and educators with access to computer and information resources and act as a test bed for further research and development of high-capacity and high-speed computer networks."

Pars. (7) to (9). Pub. L. 105–305,  $\S 2(b)(2)$ , added pars. (7) to (9).

### SHORT TITLE OF 1998 AMENDMENT

Pub. L. 105-305, §1, Oct. 28, 1998, 112 Stat. 2919, provided that: "This Act [enacting section 5513 of this title, amending this section and sections 5502, 5503, and 5511 of this title, and enacting provisions set out as notes under this section] may be cited as the 'Next Generation Internet Research Act of 1998'."

#### SHORT TITLE

Section 1 of Pub. L. 102–194 provided that: "This Act [enacting this chapter] may be cited as the 'High-Performance Computing Act of 1991'."

Pub. L. 108–423, §1, Nov. 30, 2004, 118 Stat. 2400, provided that: "This Act [enacting subchapter III of this chapter, amending sections 2051 of this title and 1862n–9 of Title 42, The Public Health and Welfare, and enacting provisions set out as a note under section 1862n–9 of Title 42] may be cited as the 'Department of Energy High-End Computing Revitalization Act of 2004'."

#### CONGRESSIONAL FINDINGS

Pub. L. 105–305,  $\S2(a)$ , Oct. 28, 1998, 112 Stat. 2919, provided that: "The Congress finds that—

"(1) United States leadership in science and technology has been vital to the Nation's prosperity, national and economic security, and international competitiveness, and there is every reason to believe that